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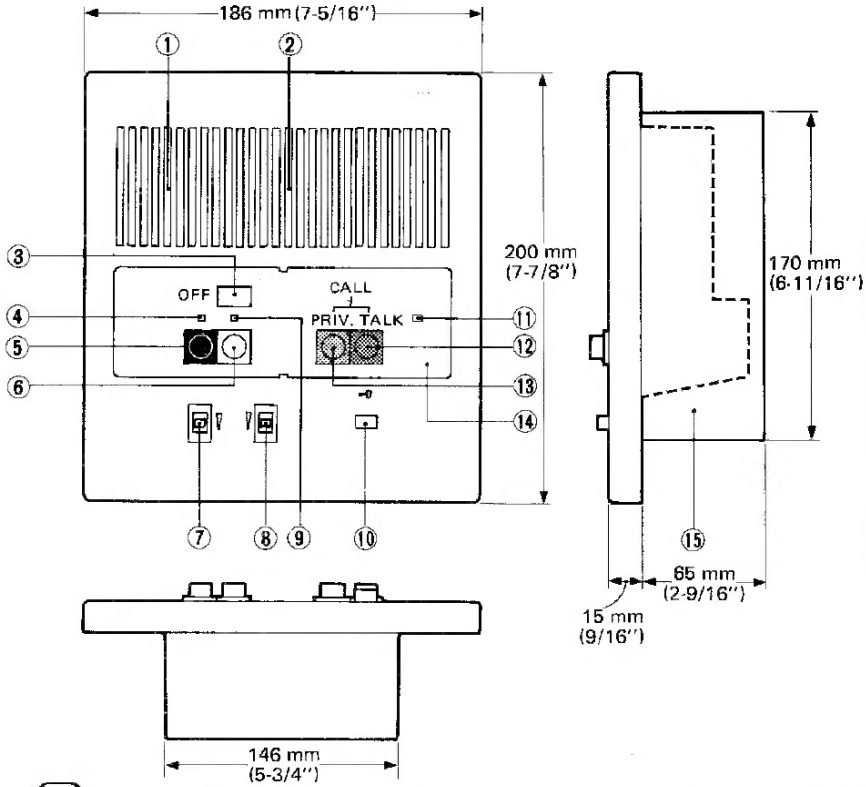
AIPHONE

HOME INTERCOM

MODEL: LAF-1B

Master station
1-call
semi-flush mount

INSTALLATION MANUAL



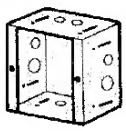
Mounting accessories;

WOOD SCREW (x 2)
(4.1 x 22 ±)

SHORTING CHIP
(Attach on LAF-1B when combined with existing LAF models)

10-PIN CONNECTOR WITH 8 WIRES
(for station wiring)

Mounting back box (Model: BBX-2)



SCREW (x 2)
(4 x 25 ±)

*Must be ordered separately.

1 NAMES AND FUNCTIONS

① Microphone
② Speaker
③ Directory card
④ Station selection indicator LED
⑤ OFF button
⑥ Station selector button
⑦ Communication volume control
⑧ Call tone volume control
⑨ Call annunciator LED
⑩ Door release button
⑪ OCCUPIED LED
⑫ TALK button
⑬ PRIVACY button
⑭ Panel
⑮ Mounting back box (Model: BBX-2)

2 SYSTEM FEATURES

1. Versatile communication system, Either All-master, Single-master or Intermixed System can be created.
2. Intermixable masters and subs, either semi-flush mount (LAF-B) or desk/wall mount type (LAF).
3. Can receive All Call announcement and Background music.
4. Sub call-in annunciator LED stays lit for approx. 20 seconds.
5. During your communication, sub call-in can be signalled by soft tone.
6. Options: * Door stations. * Door release, using RY-PA relay.
   * Paging thru an 8-ohm horn with talkback.

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3 BEFORE YOU INSTALL AND OPERATE THE EQUIPMENT
— Prohibitions and precautions —

*** Operation;**

1. On all LAF master stations, except station initiating a call, OFF button MUST BE DEPRESSED and LOCKED DOWN, or system will not work. The illuminated LED above OFF button indicates you forgot to depress OFF button, if not in use. (See Fig. 1)
2. The illuminated OCCUPIED LED indicates the other station is using the system. While this OCCUPIED LED is lit, (See Fig. 2)
   (1) Do not depress any selector button, or an electronic feedback will occur at initiating and receiving stations.
   So, when you receive calls from another master and a sub at the same time, REPLY FIRST TO THE MASTER and, after the OCCUPIED LED goes out, depress selector button of the calling sub and communicate.
   (2) Can not make All Call announcement.
3. When a sub station calls during Background music distribution, the call tone will come out through all LAF station speakers, and call-in annunciator LED stays lit for approximately 20 seconds on the called master station.

*** Installation;**

1. DO NOT CONNECT ANY TERMINAL ON ANY UNIT TO AC POWER LINES.
2. Maintain at least 50 cm (20") distance from any AC wiring. Shielded cable should be used to reduce the possibility of AC inductance.
3. Be sure not to plug power supply into AC receptacle until you complete wiring connections, and unplug before opening it.
4. Lay out your system in advance. Determine the exact location of each station. Assign station number and make a sketch showing the number of wires and color codes from one station to another. Begin your installation with master station No. 1. Upon installing second master station, we recommend a test be made for all functions, calling and talking between each station.
   After connecting and testing all the masters, begin sub station installation.
5. Insulate by tape, etc. each unused connector wire end. If connector wire end touches the other wires or back box it will cause damage to the units.

Installation location;

6. Select the installation locations that would not be exposed to temperature/ humidity extremes, water, oil, dust, iron dust, inflammable and chemical products, etc.
7. To avoid feedback, DO NOT PLACE MASTER STATION AND ANOTHER MASTER OR SUB STATIONS BACK TO BACK, OR ON A COMMON WALL BETWEEN ROOMS. (See Fig. 4)

Unit selection;

8. When making an intermixed system, note in advance that master stations: LAF-3A, LAF-5, LAF-10 console type have no button for All Call nor door release. LAF-1B and LAF-3B have only door release button. If such functions are required at console type station, please use LAF-10S.
9. If any LAF-B station: LAF-1B/3B/7B/10B (Type A) is intermixed with existing models: LAF-3A/5/10/10S/10B, install a supplied shorting chip on back of all the LAF-B units. (See Fig. 5)

Adaptor installation location

10. Locate PS-12A (or PS-12C) power supply near center of the system.

*** Maintenance**

1. Clean your equipment with a soft cloth dampened with neutral household cleanser. Never use thinner or benzine, etc.

Fig. 1

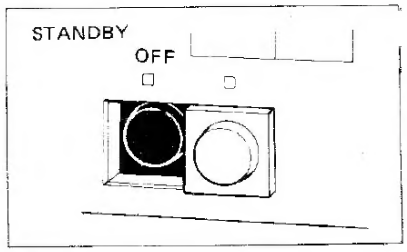


Fig. 2

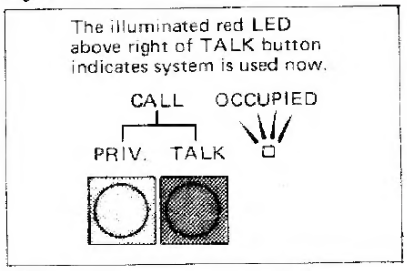


Fig. 3

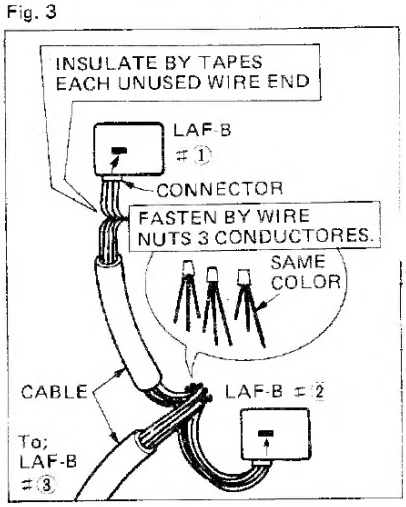


Fig. 4

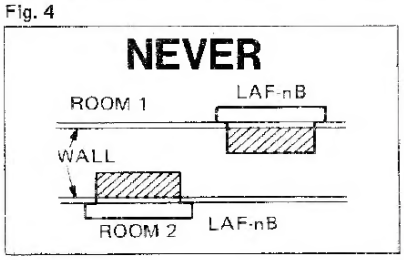
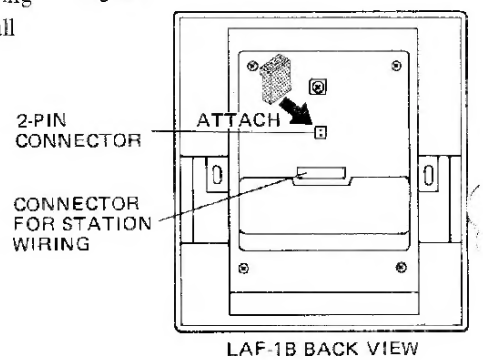


Fig. 5



LAF-1B BACK VIEW

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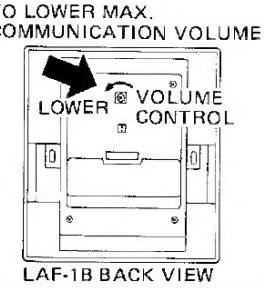
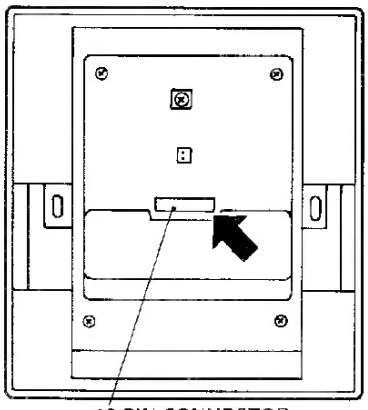
*Volume adjustment;

LAF-B unit has preset volume control, allowing you to lower the maximum level of communication. On back of LAF-1B unit, using a philip screwdriver, turn the volume counter-clockwise to achieve the desired level.
On front panel, LAF-B unit has two volume controls for communication and call tone, each adjustable to three levels as desired.

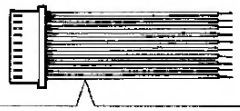


LAF-1B BACK VIEW

4 ACTUAL TERMINAL LOCATION


10-PIN CONNECTOR
(male)
LAF-1B BACK VIEW

10-PIN CONNECTOR WITH 8 WIRES OF APPROX. 22 CM (8-5/8")



PIN/WIRE COLOR CODE IDENTIFICATION

+	Red
—	Black
1	Brown
	—
	—
C	Yellow
E	Green
Y	Blue
R	Purple
L	Gray

[+], [—] : for power supply
[1] : for connecting station unit
[C] : for receiving a call and BGM
[E] : for common communication
[Y] : for sub's call-in tone during communication
[R] : for occupied LED
[L] : for door release

5 INSTALLATION

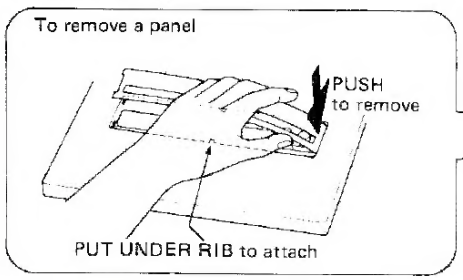
(1) Semi-flush mounting to wall (in new construction);

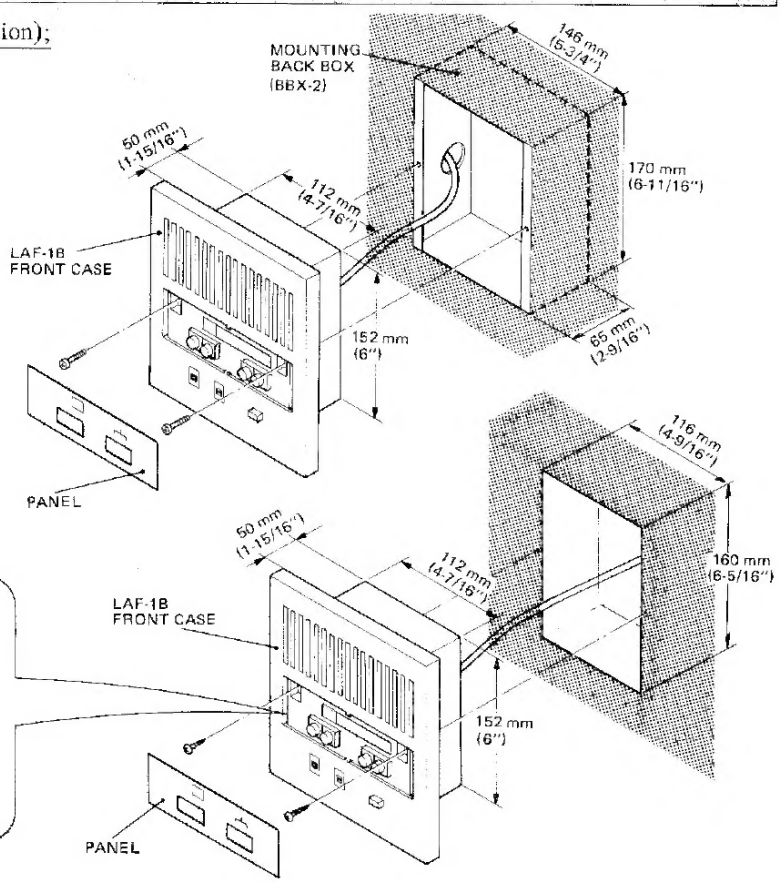
For new construction, use a mounting back box (Model BBX-2).

1. Install the back box in the wall.
2. Remove a panel on LAF-1B front case.
3. Mount LAF-1B unit to the back box with two screws (supplied).
4. Reattach the panel.

(2) Semi-flush mounting to an existing wall;

1. To install LAF-1B unit to an existing wall, cut and open a hole of H: 160 mm (6-5/16") x W: 116 mm (4-9/16"), securing depth of more than 50 mm (1-15/16").
2. Remove a plate on LAF-1B front case. Mount LAF-1B unit directly to wall with two wood screws (supplied).
3. Reattach the panel.





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6 SPECIFICATIONS

*Power source: DC 12V. Use PS-12A (or PS-12C in North America) power supply.
*Current consumption: 350 mA maximum.
*Communication: Press-to-talk, release-to-listen at calling master.
*Communication output: 800 mV maximum at 20 ohm.
*Communication network: Either All-Master, Single-Master or Intermixed System can be created.
*Calling: Electronic tone and an illuminated LED (staying lit for approx. 20 seconds), when called by sub (at master)
Electronic tone or voice direct when called by master (at master)
Electronic tone or voice direct when called by master (at sub).
*Talk channel: 1 talk channel.
*Wiring: ① Between master stations;

	Between masters	Between masters & BG-1A/1B
For communication only	5 common + 1 individual	—
For communication and BGM reception	5 common + 1 individual	4 common + 1 individual
For door release	Plus 1 common (additional)	—
For all functions as above	6 common + 1 individual	4 common + 1 individual

② Between sub station; 3 wires for each sub station.

*Wiring distance: Between master and farthest master/sub station;

AWG	24 AWG	22 AWG	20 AWG	18 AWG
Distance	400′	650′	1,000′	1,600′
Diameter	0.5 mm	0.65 mm	0.8 mm	1.0 mm
Distance	120 m	200 m	300 m	480 m

*Dimensions: H : 200 mm x W : 186 mm x D : 15 mm
(H : 7-7/8″ x W : 7-5/16″ x D : 9/16″)
Recessed: H : 152 mm x W : 112 mm x D : 50 mm
(H : 6″ x W : 4-7/16″ x D : 1-15/16″)
*Weight: Approximately 460 g (1.01 lbs.).
*RY-PA relay contact capacity: AC 110V, 1A.
DC 24V, 1A.

INTERCOM SYSTEMS
AIPHONE
HOME, BUSINESS, INDUSTRY

Printed in Japan (E)

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